SEQUENCE LISTING

<110> KETCHUM, Karen et al.

<120> ISOLATED HUMAN TRANSPORTER PROTEINS,
   NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
   AND USES THEREOF

<130> CL001013

<150> 09/815,301
<151> 2001-03-23

<150> 60/254,554
<151> 2000-12-12

<160> 5

<170> FastSEQ for Windows Version 4.0

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<212> DNA
<213> Human

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<212> PRT

<213> Human

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Ser Phe Gly Val Phe Phe Val Glu Phe Val Ala Ala Phe Glu Glu Gln
            35   40   45
Ala Ala Arg Val Ser Trp Ile Ala Ser Ile Gly Ile Ala Val Gln Gln
        50   55   60
Phe Gly Ser Pro Val Gly Ser Ala Leu Ser Thr Lys Phe Gly Pro Arg
65   70   75   80
Pro Val Val Met Thr Gly Gly Ile Leu Ala Ala Leu Gly Met Leu Leu
                85   90   95
Ala Ser Phe Ala Thr Ser Leu Thr His Leu Tyr Leu Ser Ile Gly Leu
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Leu Ser Gly Ser Gly Trp Ala Leu Thr Phe Ala Pro Thr Leu Ala Cys
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Leu Ser Cys Tyr Phe Ser Arg Arg Arg Ser Leu Ala Thr Gly Leu Ala
        130   135   140
Leu Thr Gly Val Gly Leu Ser Ser Phe Thr Phe Ala Pro Phe Phe Gln
145   150   155   160
Trp Leu Leu Ser His Tyr Ala Trp Arg Gly Ser Leu Leu Leu Val Ser
                165   170   175
Ala Leu Ser Leu His Leu Val Ala Cys Gly Ala Leu Leu Arg Pro Pro
            180   185   190
Ser Leu Ala Glu Asp Pro Ala Val Gly Gly Pro Arg Ala Gln Leu Thr
        195   200   205
Ser Leu Leu His His Gly Pro Phe Leu Arg Tyr Thr Val Ala Leu Thr
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Leu Ile Asn Thr Gly Tyr Phe Ile Pro Tyr Leu His Leu Val Ala His
225   230   235   240
Leu Gln Asp Leu Asp Trp Asp Pro Leu Pro Ala Ala Phe Leu Leu Ser
            245   250   255
Val Val Ala Ile Ser Asp Leu Val Gly Arg Val Val Ser Gly Trp Leu
            260   265   270
Gly Asp Ala Val Pro Gly Pro Val Thr Arg Leu Leu Met Leu Trp Thr
        275   280   285
Thr Leu Thr Gly Val Ser Leu Ala Leu Phe Pro Val Ala Gln Ala Pro
    290   295   300
Thr Ala Leu Val Ala Leu Ala Val Ala Tyr Gly Phe Thr Ser Gly Ala
305   310   315   320
Leu Ala Pro Leu Ala Phe Ser Val Leu Pro Glu Leu Ile Gly Thr Arg
            325   330   335
Arg Ile Tyr Cys Gly Leu Gly Leu Leu Gln Met Ile Glu Ser Ile Gly
            340   345   350
Gly Leu Leu Gly Pro Pro Leu Ser Gly Tyr Leu Arg Asp Val Ser Gly
        355   360   365
Asn Tyr Thr Ala Ser Phe Val Val Ala Gly Ala Phe Leu Leu Ser Gly
370   375   380
Ser Gly Ile Leu Leu Thr Leu Pro His Phe Phe Cys Phe Ser Thr Thr
385   390   395   400
Thr Ser Gly Pro Gln Asp Leu Val Thr Glu Ala Leu Asp Thr Lys Val
                405   410   415
Pro Leu Pro Lys Glu Gly Leu Glu Gly Gly Leu Asn Ser Thr Glu Ser
            420   425   430

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Leu Gly Leu His Arg Thr Thr Val Pro
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<212> DNA
<213> Human

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66

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<211> 456
<212> PRT
<213> Rattus norvegicus

<400> 4

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Ser Val Phe Phe Arg Glu Leu Lys Arg Asp Phe Gly Ala Gly Tyr Ser
        35                  40                  45
Asp Thr Ala Trp Val Ser Ser Ile Met Leu Ala Met Leu Tyr Gly Thr
    50                  55                  60
Gly Pro Leu Ser Ser Ile Leu Val Thr Arg Phe Gly Cys Arg Pro Val
65                  70                  75                  80
Met Leu Ala Gly Gly Leu Leu Ala Ser Ala Gly Met Ile Leu Ala Ser
                85                  90                  95
Phe Ala Ser Arg Leu Leu Glu Leu Tyr Leu Thr Ala Gly Val Leu Thr
            100                 105                 110
Gly Leu Gly Leu Ala Leu Asn Phe Gln Pro Ser Leu Ile Met Leu Gly
        115                 120                 125
Leu Tyr Phe Glu Arg Arg Arg Pro Leu Ala Asn Gly Leu Ala Ala Ala
    130                 135                 140
Gly Ser Pro Val Phe Leu Ser Thr Leu Ser Pro Leu Gly Gln Leu Leu
145                 150                 155                 160
Gly Glu Arg Phe Gly Trp Arg Gly Gly Phe Leu Leu Phe Gly Gly Leu
                165                 170                 175
Leu Leu His Cys Cys Ala Cys Gly Ala Val Met Arg Pro Pro Pro Gly
            180                 185                 190
Pro Gln Pro Arg Pro Asp Pro Ala Pro Pro Gly Gly Arg Ala Arg His
            195                 200                 205
Arg Gln Leu Leu Asp Leu Ala Val Cys Thr Asp Arg Thr Phe Met Val
    210                 215                 220
Tyr Met Val Thr Lys Phe Leu Met Ala Leu Gly Leu Phe Val Pro Ala
225                 230                 235                 240
Ile Leu Leu Val Asn Tyr Ala Lys Asp Ala Gly Val Pro Asp Ala Glu
                245                 250                 255
Ala Ala Phe Leu Leu Ser Ile Val Gly Phe Val Asp Ile Val Ala Arg
            260                 265                 270
Pro Ala Cys Gly Ala Leu Ala Gly Leu Gly Arg Leu Arg Pro His Val
            275                 280                 285
Pro Tyr Leu Phe Ser Leu Ala Leu Leu Ala Asn Gly Leu Thr Asp Leu
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Ala Phe Gly Leu Ser Tyr Gly Met Val Gly Ala Leu Gln Phe Glu Val
                  325                   330                   335
Leu Met Ala Thr Val Gly Ala Pro Arg Phe Pro Ser Ala Leu Gly Leu
                  340                   345                   350
Val Leu Leu Val Glu Ala Val Ala Val Leu Ile Gly Pro Pro Ser Ala
                  355                   360                   365
Gly Arg Leu Val Asp Ala Leu Lys Asn Tyr Glu Ile Ile Phe Tyr Leu
                  370                   375                   380
Ala Gly Ser Glu Val Ala Leu Ala Gly Val Phe Met Ala Val Thr Thr
385                   390                   395                   400
Tyr Cys Cys Leu Arg Cys Ser Lys Asn Ile Ser Ser Gly Arg Ser Ala
                  405                   410                   415
Glu Gly Gly Ala Ser Asp Pro Glu Asp Val Glu Ala Glu Arg Asp Ser
                  420                   425                   430
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Glu Val Leu Ser Pro Arg Ala Gly
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<210> 5
<211> 456
<212> PRT
<213> Mus musculus

<400> 5
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                  20                  25                  30
Ser Val Phe Phe Arg Glu Leu Lys Arg Asp Phe Gly Ala Gly Tyr Ser
                  35                  40                  45
Asp Thr Ala Trp Val Ser Ser Ile Met Leu Ala Met Leu Tyr Gly Thr
                  50                  55                  60
Gly Pro Leu Ser Ser Ile Leu Val Thr Arg Phe Gly Cys Arg Pro Val
65                  70                  75                  80
Met Leu Ala Gly Gly Leu Leu Ala Ser Ala Gly Met Ile Leu Ala Ser
                  85                  90                  95
Phe Ala Ser Arg Leu Val Glu Leu Tyr Leu Thr Ala Gly Val Leu Thr
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Gly Leu Gly Leu Ala Leu Asn Phe Gln Pro Ser Leu Ile Met Leu Gly
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Leu Tyr Phe Glu Arg Arg Arg Pro Leu Ala Asn Gly Leu Ala Ala Ala
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Gly Ser Pro Val Phe Leu Ser Met Leu Ser Pro Leu Gly Gln Leu Leu
145                 150                 155                 160
Gly Glu Arg Phe Gly Trp Arg Gly Gly Phe Leu Leu Phe Gly Gly Leu
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Leu Leu His Cys Cys Ala Cys Gly Ala Val Met Arg Pro Pro Pro Gly
                  180                 185                 190
Pro Pro Pro Arg Arg Asp Pro Ser Pro His Gly Gly Pro Ala Arg Arg
                  195                 200                 205
Arg Arg Leu Leu Asp Val Ala Val Cys Thr Asp Arg Ala Phe Val Val
      210                 215                 220
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Tyr Val Val Thr Lys Phe Leu Met Ala Leu Gly Leu Phe Val Pro Ala
225                 230                 235                 240
Ile Leu Leu Val Asn Tyr Ala Lys Asp Ala Gly Val Pro Asp Ala Glu
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Ala Ala Phe Leu Leu Ser Ile Val Gly Phe Val Asp Ile Val Ala Arg
                260                 265                 270
Pro Ala Cys Gly Ala Leu Ala Gly Leu Gly Arg Leu Arg Pro His Val
                275                 280                 285
Pro Tyr Leu Phe Ser Leu Ala Leu Leu Ala Asn Gly Leu Thr Asp Leu
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305                 310                 315                 320
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                340                 345                 350
Val Leu Leu Val Glu Ala Val Ala Val Leu Ile Gly Pro Pro Ser Ala
                355                 360                 365
Gly Arg Leu Val Asp Ala Leu Lys Asn Tyr Glu Ile Ile Phe Tyr Leu
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Ala Gly Ser Glu Val Ala Leu Ala Gly Val Phe Met Ala Val Thr Thr
385                 390                 395                 400
Tyr Cys Cys Leu Arg Cys Ser Lys Asn Ile Ser Ser Gly Arg Ser Ala
                405                 410                 415
Glu Gly Gly Ala Ser Asp Pro Glu Asp Val Glu Ala Glu Arg Asp Ser
                420                 425                 430
Glu Pro Met Pro Ala Ser Thr Glu Glu Pro Gly Ser Leu Glu Ala Leu
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Glu Val Leu Ser Pro Arg Ala Gly
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